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In the Claims:

Please amend claim 13, last line, to delete "—" from before "during" and after "properties".

REMARKS

Applicants' attorney appreciates the time taken by the Examiner during the telephone interview on February 6, 2001 to discuss the merits of the present case. Reconsideration of the present application in view of the foregoing amendment and the following remarks is requested respectfully.

I. DISCUSSION OF THE § 112 REJECTION

Claims 1-9 and 14-15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Examiner has rejected the claims on the basis that the specification contains no disclosure of "wood product." Applicants respectfully direct the Examiner's attention to the disclosure at pages 17, lines 20-21 and page 18, lines 5-18 for a description of cellulose dietary fiber derived from soft and hard woods. Accordingly, applicants submit respectfully that the Section 112 rejection of these claims be withdrawn.

II. CLAIMS 1-15 DEFINE PATENTABLE SUBJECT MATTER

A. Summary Of The Claimed Invention

The present invention relates to a process for modifying the properties of particulate dietary fiber material by dispersing said particulate material in a liquid media, applying an abrupt pressure change to the particulate material in the liquid media, and recovering the

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modified dietary fiber material. As set forth in the specification, dietary fibers are fibers that are derived from corn, wheat, cellulose, oats, or other natural grains, as well as wood products. In the specification, dietary fiber is defined as:

> used in a variety of food applications as both a means to reduce overall fat and calorie content for the ultimate food product and as a bulking agent replacement for products with reduced sugar or sweeteners. ... Dietary fibers are usually fibers derived from corn, wheat, cellulose, oats, or other natural grains. *Generally, a dietary fiber is high in insoluble (i.e., indigestible) fiber content, ideally low in calories and low in fat content.*

See Specification at page 1, lines 16-26 (emphasis added). The ordinary meaning of dietary fiber is found in Webster's New Universal Unabridged Dictionary, as "fiber (Def. 9)[1975-80]", which is further defined therein as follows:

> **fiber** 9. Nutrition. Also called bulk, dietary fiber, roughage .a. the structural part of plants and plant products that consists of carbohydrates, as cellulose and pectin, that are wholly or partially indigestible and when eaten stimulate peristalsis in the intestine.

Applicants submit that an appreciation of the nature and meaning of dietary fiber is important in understanding the applicants' claimed invention and its patentable distinction over the teachings of the prior art cited by the Examiner in the Final Action.

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B. The § 102 Rejection

Claims 1, 5 and 14-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Allen (U.S. Patent No. 3,389,997) (the "Allen patent"). The rejection of Claims 1, 5 and 14-15 based on § 102(b) is traversed respectfully.

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The Allen patent is directed to the "electro-hydraulic" *separation, and recovery, of* intra-cellular proteins from the non-protein portion of a variety of materials, including wheat, oats, and peanut meal. Applicants submit that the separation function of the Allen method (which is not part of Applicants' claimed invention a discussed below) reveals that the materials undergoing such electro-separation are not dietary fiber materials. Dietary fiber materials do not contain large amounts of proteins or high calorie materials such as fats, and the Allen method clearly contemplates using such high protein and caloric materials as starting materials to result in the recovery of meaningful amounts of protein. In contrast and as noted above, applicants describe dietary fiber, consistent with its ordinary dictionary meaning, as "*high in insoluble (i.e., indigestible) fiber content, ideally low in calories and low in fat content*".

Although the Examiner has characterized the materials used in the Allen method as dietary fiber, the peanut meal example disclosed in Allen demonstrates clearly that such is not the case. The Allen reference exemplifies its "electro-hydraulic" separation method with ground shelled peanuts[1], a legume seed that contains 65% protein by weight (col. 3, line

[1] Note that "decorticated" means "husked", and peanut meal is simply ground peanuts. *See* Webster's New Universal Unabridged Dictionary.

22) and twice as much highly caloric peanut oil[2,3] It is clearly well known that peanuts are *not* a low calorie material and as such do not qualify as a dietary fiber. In fact, the USDA has published facts on peanuts which describe an ounce of peanuts as containing only 2.4 g (8.5% by weight) by weight of dietary fiber.

In contrast to the Allen method where the recovered material is high in protein and the discarded material is highly likely to be high in fiber content, the present method does not involve a separation, but rather begins and ends with a high fiber content material.

Regardless of the nature of the materials treated by the Allen protein-separation method, the protein-separation function essential to the Allen method is simply not part of Applicants claimed method. The Allen method recovers protein extracted from a plant or animal cellular source material by means of the application of an electrical shock, and discards the remainder that contains the non-proteinacious fiber-containing portion of the

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[2] The USDA publishes nutritional information on its website www.nal.usda.gov. For example, the components of peanuts, all types, raw is as follows:

NDB No: 16087

Nutrient	Units	1 oz ------- 28.350 g
Proximates		
Water	g	1.843
Energy	kcal	160.745
Energy	kj	672.462
Protein	g	7.314
Total lipid (fat)	g	13.960
Carbohydrate, by difference	g	4.576
Fiber, total dietary	g	2.410
Ash	g	0.661

[3] The 65% protein must have been calculated based on defatted peanut, that is absent the peanut oil, which is twice the amount of protein.

source material. Applicants' claims do not recite a separation step that recovers protein from dietary fiber material nor do they utilize the application of an electrical shock. An electrical shock is not the same as a mechanical shock force in the presently claimed invention, and no electrical current is applied to the dietary fiber processed in accordance with the method of the present invention.

Accordingly, Applicants submit respectfully that the Allen patent does not anticipate, or even render obvious, Claims 1, 5 and 14-15. Applicants therefore request respectfully that the rejection of Claims 1, 5 and 14-15 based on § 102(b) be withdrawn.

C. The Presently Claimed Invention is Patentably Unobvious Over the Disclosure of the '997 Patent

Claims 3-4 and 6-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Allen patent. The rejection of Claims 3-4 and 6-9 based on § 103(a) is traversed respectfully. Claims 3-4 and 6-9 all depend (directly or indirectly) from Claim 1 which, as set forth more fully above, is neither anticipated by nor obvious in view of the Allen patent. As a result, insofar as Claims 3-4 and 6-9 depend from a non-obvious claim, they are similarly non-obvious. Accordingly, it is respectfully submitted that the rejection of Claims 3-4 and 6-9 based on § 103(a) should be withdrawn.

D. The Presently Claimed Invention is Patentable Over the '997 Patent in View of Redding Jr.

Claims 2 and 10-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Allen patent in view of Redding Jr. (U.S. Patent No. 5,455,342) ("the '342 patent"). This rejection is traversed respectfully.

As described above, the Allen patent pertains to the separation and recovery of intra-

cellular proteins from a variety of whole plant materials by means of an electric shock or electro-hydraulic process. The processes and techniques disclosed in the Allen patent are, therefore, directed to the problems and limitations that arise in the extraction of intra-cellular proteins. In contrast, the '342 patent pertains to a process for modifying the properties of polymeric compounds such as starch and gum arabic. Although a large number of polymeric compounds are disclosed as being useful in the '342 disclosed method, dietary fibers are conspicuously absent from that disclosure. Moreover, there is no suggestion that the '342 patent method of piston driven abrupt pressure be used to separate and recover proteins from polymers (which, except for polymeric proteins, do not contain protein) or dietary fibers which contain little, if any, protein.

In view of the absence of any suggestion in either reference to combine the teachings thereof, and further in view of the complete absence in either reference of the suggestion to apply an abrupt pressure change to dietary fiber, applicants submit respectfully that the Allen patent and the '342 patent are not properly combinable and cannot support an obviousness rejection of the present method claims.

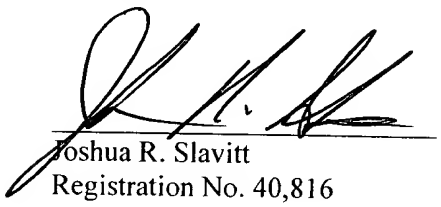
III. CONCLUSION

In view of the foregoing amendment and remarks, favorable reconsideration and prompt notice of allowance of all of the pending claims are requested respectfully.

Should the Examiner continue to have any doubts as to the allowability of any of the claims, he is requested respectfully to telephone the applicants' undersigned attorney to

discuss same before issuing further action, as it is believed such discussion would help to expedite the prosecution of this application.

Respectfully submitted,



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